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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/965,921	09/28/2001	Yongxia Wang	1898	4216

7590

06/11/2002

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EXAMINER

SERGEANT, RABON A

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 06/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/965,921

Applicant(s)
Wang et al.

Examiner
Rabon Sergeant

Art Unit
1711



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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1. As filed, the application contains two number 8 claims. Under the provisions of 37 CFR 1.126, the first number 8 claim has been renumbered as claim 7.

2. Claims 9 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 depends from claim 8, which requires the presence of an acrylic copolymer; however, within claim 9, the lower limit of "about 0" for the acrylic component causes this component to be optional. As a result, claim 9 fails to further limit claim 8.

3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Firstly, within lines 2 and 3, the language, "up to about", renders the claim indefinite, because "about" allows for values above the recited numerical value; therefore, it is unclear if "up to about 10" is limited to values no higher than 10.

Secondly, within line 3, the language, "as further a", is improper.

4. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The reactive hot melt adhesive composition lacks antecedence from claim 1. Furthermore, claim 1 is drawn to a method, rather than a composition.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fuhr et al. ('951).

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Patentees disclose the use of flame retardants within plastics, including polyurethanes, wherein ethylene-bistetrabromophthalimide is disclosed as a suitable flame retardant. See column 2, lines 35 and 36 and column 3, lines 1 and 2.

Even if the reference is not anticipatory due to the number of disclosed species, the position is taken that it would have been obvious from the teachings of the reference to utilize the known flame retardant within any polyurethane formulation. It has been held that it is *prima facie* obvious to utilize a known compound for its known function. In re Linder, 173 USPQ 356; In re Dial et al., 140 USPQ 244.

7. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merz et al. ('873) in view of Aoyama et al. ('219) or Fuhr et al. ('951) or Fesman ('105 or '044 or '485), each further in view of Lee ('040).

Merz et al. disclose reactive hot-melt polyurethane adhesives comprising the reaction product of polyisocyanates with polyols, in combination with thermoplastic materials, including acrylate polymers, and flame retardants. See abstract; column 2, lines 20+; column 3, lines 35+; and column 4, line 21.

8. Though the primary reference discloses that flame retardants may be used within the adhesive, the reference is silent with respect to the species of flame retardants. However, Aoyama et al., Fuhr et al., and Fesman each disclose the use of applicants' claimed flame retardants within polymeric compositions. Fuhr et al. and Fesman further disclose polyurethanes as being suitable

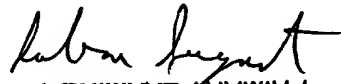
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polymeric species. See columns 2 and 3 within Aoyama et al. See column 2 within Fuhr et al. See column 5 within Fesman. Since it has been held that it is *prima facie* obvious to utilize a known component for its known function, it would have been obvious to incorporate the flame retardants of the secondary references into the adhesive of Merz et al. Furthermore, Lee discloses at column 3, lines 58+ that the effectiveness of brominated flame retardants, such as ethylene bistetrabromophthalimide, can be increased by adding antimony oxide into the composition. Accordingly, it would have been obvious to incorporate the additionally claimed (claims 6 and 10) flame retardants into the adhesive of Merz et al.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

R. Sergent

June 7, 2002


RABON SERGENT
PRIMARY EXAMINER